Amendments to the Specification:

*Please amend paragraph [0001] as follows:

[0001] The present application is a continuation in part of U.S. Patent Application No. 09/127,502, filed July 31, 1998 (now U.S. Patent No. 6,345,104 ~~allowed~~), which is a continuation-in-part of U.S. Patent Application No. 09/074,034, filed May 6, 1998 (now U.S. Patent No. 6,449,377). The 09/127,502 application is also a continuation-in-part of U.S. Patent Application No. 08/967,693, filed November 12, 1997 (now Patent 6,122,392), which is a continuation of application 08/614,521, filed March 15, 1996 (now Patent 5,745,604), which is a continuation of application 08/215,289, filed March 17, 1994 (now abandoned). The 09/127,502 application is also a continuation-in-part of application 08/649,419, filed May 16, 1996 (now Patent No. 5,862,260). The 09/127,502 application also claims the benefit of U.S. Provisional application 60/082,228, filed April 16, 1998. The present application also claims the benefit of assignee's U.S. Provisional Patent Application No. 60/350,505, filed January 18, 2002, titled "Data Hiding Through Arrangement of Objects."

*Please amend paragraph [0002] as follows:

[0002] The present application is also related to U.S. Patent Application No. 09/940,872, filed August 27, 2001 (published as US 2003-0039376 A1).

*Please amend paragraph [0007] as follow:

[0007] Several particular watermarking techniques have been developed. The reader is presumed to be familiar with the literature in this field. Particular techniques for embedding and detecting imperceptible watermarks in media signals are detailed in the assignee's co-pending U.S. Patent Application No. 09/503,881 (now U.S. Patent No. 6,614,914) and U.S. Patent Application No. 6,122,403, which are each herein incorporated by reference.

*Please amend paragraph [0008] as follows:

[0008] In parent application no. 09/127,502 (now U.S. Patent No. 6,345,104) we disclose the following: *Many security documents are still designed largely by hand. A designer works at a drafting table or computer workstation, and spends many hours laying-out minute (e.g. 5 mm x 5 mm) excerpts of the design. To aid integration of watermark and/or calibration pattern data in this process, an accessory layout grid can be provided, identifying the watermark "bias" (e.g. -3 to +3) that is to be included in each 250 micron cell of the security document. If the accessory grid indicates that the luminance should be slightly increased in a cell (e.g. 1%), the designer can take this bias in mind when defining the composition of the cell and include a touch less ink than might otherwise be included. Similarly, if the accessory grid indicates that the luminance should be somewhat strongly increased in a cell (e.g. 5%), the designer can again bear this in mind and try to include more ink than might otherwise be included. Due to the substantial redundancy of most watermark encoding techniques, strict compliance by the designer to these guidelines is not required. Even loose compliance can result in artwork that requires little, if any, further modification to reliably convey watermark and/or calibration information.*

*Please amend paragraph [0004] as follows:

[0024] While the above signal-conveying techniques rely on the arrangement of message objects in a spatial domain (e.g., in an image), message formation or detection can be based in either a spatial or transform (e.g., Fourier or frequency) domain. For example, the arrangement of the message objects in the spatial domain may have significance in a frequency domain (e.g., may correspond to a pattern of peaks, etc.). Message detection can be accordingly facilitated, e.g., as discussed in Assignee's U.S. Patent Application Nos. 09/940,872 (published as US 2003-0039376 A1) and 09/503,881 (now U.S. Patent No. 6,614,914), each of which is herein incorporated by reference. The incorporated by reference patent documents detail many techniques for signal hiding and message detection.

*Please amend paragraph [0041] as follows:

[0041] An image created according to our inventive techniques can be read using steganographic or digital watermarking decoding techniques, e.g., as described in assignee's 09/571,422 and/or 09/503,881 (now U.S. Patent No. 6,614,914) applications. In one implementation, Digimarc MediaBridge watermark reading software, available from Digimarc Corporation headquartered in Tualatin, OR, is used to read an image including a corresponding MediaBridge digital watermark signal represented through our message object arranging techniques. Of course, other decoding techniques can be used, particularly when they correspond to the techniques used to generate the original watermark signal. (For example, when using a Digimarc MediaBridge reader, the watermark signal is preferably created using a MediaBridge signal generator or embedder.). Most commonly, the reader identifies the message objects from the different levels of contrast (or color, gray-scale, luminance, etc.) between a message object and other objects or background.